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7 THE ROLE OF IMAGINED INTERACTIONS IN ONLINE COMMUNICATION

Kristen M. Berkos
Bryant University

Every semester in which I teach a class about imagined interaction (II) research, I find the students get very excited. They readily identify with the concept of IIs, particularly as I provide examples of preparing for job interviews and asking for dates or recalling an argument with a significant other (see Chaps. 1 and 2, this volume), mentally replaying it again and again thus keeping the conflict alive. I tell the students about some of my own IIs of the day leading up to the lesson and ask them to share some of their IIs. Each semester, students readily provide examples of recent IIs and ask questions about what is or is not considered an II or related II research. The same series of questions seem to arise, no matter which class or which semester I teach the students about IIs: "Can IIs occur online?" Typically, I pose the question back to the students in a "what do you think?" format, asking them to apply the definition and provide support for their answers. Overwhelmingly, the students reply, "Yes! I have them all the time!"

PREVALENCE OF ONLINE COMMUNICATION

For many students, computer-mediated communication (CMC) is as much a part of their social life as talking on the telephone. Students use the Internet to socialize through e-mail, newsgroups, discussion boards, blogs,

and especially instant messenger (IM). Each semester, as students bring up their online IIs, they mention having a proactive II before sending an IM to a prospective date or a retroactive II recalling an online argument with a significant other via IM. Sometimes the students practice typing a date request, then read it over and edit or delete the request before hitting the send button. They may even solicit the advice of their friends, essentially having their friends help them create the II. Other times, the students may scroll through an IM conversation that has already taken place to replay the event in their minds, looking for alternatives, or even just memorizing the words for future ammunition in romantic arguments, for example.

The average Internet user in the United States spends 3 hours a day online according to a report by Nie and his associates (2004). Much of that online time is devoted to work; more than half to communication. The Stanford Institute revealed these facts in a new survey for the Quantitative Study of Society, a research group that has been exploring the social consequences of the Internet. The survey reveals how much the Internet has become embedded in American life, both at home and at the office, where approximately one-third of one's total time on the Internet is consumed. But for most users, the Internet is a means of communication. Approximately 57% of Internet time is spent on e-mail, IM-ing or in chatrooms. Of this 57%, work-related communications constitutes about one-third; communication with friends, one-third; and family, about one-sixth (Nie, Simpser, Stepanikova, & Zheng, 2004).

Internet usage is so common that relationships are formed online through services like eharmony.com. Parks and Floyd (1996) found that the online formation of personal relationships to be extremely common, especially for women. One interesting facet of CMC is the possibility of a relatively isolate communication encounter, such as the multiple drafts of an e-mail one can write before the recipient even becomes aware of the e-mail message. Although letter writing offers similar possibilities in terms of isolation and drafts of communication, the ease of which crafting and redrafting messages in a visible format may become tedious with ink and stationary. The nature of CMC allows for multiple drafts to be written, stored, revisited, revised, sent to the intended recipient, copied to other recipients, and overall be documented in cyberspace.

Another interesting facet of CMC is the dampened effect of social pressure (Lee & Nass, 2003). Lee and Nass found that participants were more likely to conform to social pressures in an online interaction as compared with face-to-face encounters. Because of the possibilities of CMC as compared with face-to-face conversations or other forms of communication, it stands to reason that individuals may become actively involved in the cognitive processing or planning of their online messages. The study reported in this chapter examined the role of IIs in online communication.

Specifically, four research questions were posed:

RQ1: Which topics do students have IIs about when communicating online?
RQ2: Who are the imagined conversational partners in individuals' online IIs?
RQ3: How often do individuals change their online messages because of an II?
RQ4: How do IIs play a role in individuals' online communication?

RESEARCH DESIGN

For the study, 119 participants were drawn from a convenience sample of students enrolled in a communication course at a small, private, northeast university. Students at this university are quite technologically savvy. The university is one of the "most wired" campuses in the country, and the student participants regularly communicate online. Participants completed a survey asking them about their internet and II usage. All students in this population have an e-mail address. The students ranged in age from 17 to 44, with a mean age of 20.46 ($SD = 2.95$). Of the 119 students surveyed, 117 have been communicating online for more than 1 year. The average number of years communicating with others online is 6.25 years. This information may suggest that students completing the survey are comfortable with Internet technology and specifically CMC. Online communication is a part of their regular, everyday interaction.

Some participants completed the survey during class time, whereas others completed the survey at home and brought the completed surveys back to campus. Students were given as much time as they needed. After completing demographic information about their age, biological sex, and internet usage, a paragraph described the nature of II. In Berkos, Kearney, Allen, and Plax (2001), we used the following description of IIs that was included in the present study:

> Very often people talk to themselves. Sometimes that talk includes what researchers call "imagined interactions." This kind of self-talk involves mental conversations with a partner who may not even be physically present. Such mental conversations might occur before an actual conversation or afterwards. They might even occur in place of having an actual conversation. Imagined interactions can be one-sided where one person does most of the talking or they can be more two-sided. These mental conversations can be very brief or very long. They can be fairly ambiguous or highly detailed. They might also address a number of different topics or focus exclusively on one thing.

This description served an important function in the survey. Students were informed about the nature of IIs, so that they would be able to answer questions that specifically required them to think about IIs specifically, instead of communication in general. Although it is possible that some students may have been confused, open-ended examples indicated that students had a solid understanding of the concept, even though they were not required to write out their actual IIs when reporting on their II tendencies and patterns. Furthermore, student participants were enrolled in an introductory communication course where they had learned about IIs in class.

Following the description of IIs, participants answered a series of questions about their IIs while using the Internet. Students responded in an open-ended format by writing directly on the questionnaire. The students were directed with two statements and were asked two questions. The first directive stated, "List some of the topics you recall discussing in some of your most recent online imagined interactions." The second directive stated, "Please indicate with whom you have most of your imagined interactions while communicating online." The first question asked, "How often when talking online will you type a sentence, then erase or change what you have written because you imagine your partner's specific response? Please list a recent example" The last question was, "How else do your imagined interactions play a role in your online communication?"

These responses were typed by research assistants. The 692 responses from 119 participants (some questions yielded multiple responses) were read and coded by two independent raters. A random sample of responses (about 10%) was rated by both raters to test for interrater reliability for all items. Overall agreement on all items was 85%. Cohen's is a measure of inter-rater reliability that takes into account random or chance agreement between coders. The Cohen's reliability for the topic question, $\kappa = .77$, the partner question, $\kappa = .77$, the changing as a result of an II question, $\kappa = .72$, and the other ways IIs play a role, $\kappa = .75$. When the two raters disagreed, they discussed their rationale for the rating until agreement was reached.

FINDINGS

Topics of Online IIs

In response to the first research question, which asked what topics participants recall from their IIs about online communication, students generated 208 responses that included 26 separate topics. Six main topics emerged from the 26 separate topics generated by the students. The top six topics were school ($n = 43$), social plans ($n = 40$), dating ($n = 34$), sports ($n = 24$), conflict ($n = 19$), and recent events or gossip ($n = 11$). Other topics included work, travel, sex, food, music, holidays, politics, money, television, movies, "important things", advice, religion, information seeking, and "did it go as imagined?" Given that the data was collected in New England as the Boston Red Sox approached their first world series victory in 87 years, it is possible that the number of online IIs surrounding sports may be slightly inflated. However, if not sports talk and sports IIs, it seems reasonable to conclude that these same individuals would have found another sports or entertainment topic to have IIs about.

Online IIs Conversational Partners

Participants reported having IIs regarding online communication with 12 different types of individuals. Romantic partners made up the largest category with 56 responses. The next most common response was friends ($n = 43$) followed by family ($n = 17$). Participants also had online IIs with potential romantic partners ($n = 16$) and professors ($n = 8$). The other II partners listed were business partners/customers ($n = 6$), ex-relational partners ($n = 5$), bosses (n = 5), classmates ($n = 4$), teammates ($n = 1$), and acquaintances ($n = 1$).

Effects of IIs on Online Message Formation

Participants reported sometimes typing something online, then having an II about what they were writing, and deleting or rephrasing their initial message based on their II. Most participants said they changed messages based on their IIs very often ($n = 37$), often ($n = 20$), sometimes ($n = 25$). Only 12 participants said this does not happen often and 15 participants said it did not apply to them. When asked to generate examples about instances when they have changed a message based on an II, 83 participants responded. Of the 83 responses, 25 messages were changed as a way to avoid conflict, several of these messages described specific conflicts with romantic partners. For example, one participant responded, "I feel that it will sound funny or be taken the wrong way. I was giving my ex some advice on his love life and everything I would type I would erase because I thought he'd be upset." Another example stated, "If he writes something cooperative I may change what I said to try to reduce conflict or to reword what I said so it sounds more constructive." Other conflict-avoidant online IIs occurred with teammates, friends, family, and acquaintances. One student wrote, "The other day I type in to a friend on the v-ball [volleyball] team, well if the coach would have done this, this, and this we would have won, but I erased it because I figured her response wouldn't be good."

Twenty responses dealt with making their messages more neutral or grammatically correct. For instance, one participant wrote "reworded the sentence so it did not come across as a sexual innuendo" and "when asking a favor." Other responses were changed to manage impressions (n = 7). These included responses such as "talking to a girl and didn't want to sound mean" or "I was going to say goodnight and have a good day, but then I realized he doesn't say these things so I erased it."

II's Effects on Online Communication

The fourth research question asked how imagined interactions play a role in participants' online communication. A variety of responses were provided (n = 46), breaking into five main categories with multiple responses for each. The five categories include communication improvement, emotion management, proactive/rehearsal, situation management, business usage. Table 7.1 contains the categories and a brief example of each category.

Category 1: **Emotion Management (n = 14).** Emotion management occurs when individuals have IIs to better control the emotions of themselves or their conversational partners (real or imagined). Emotion management IIs included responses such as "They help you get your thoughts out, but there are times when you really don't want to be so blunt so you soften your statement." Another example of emotion management was "They sometimes cause expectations of how the conversation will go. If the conversation doesn't go the way I had hoped, I sometimes feel disappointed."

Category 2: **Communication Improvement (n = 11).** Communication improvement is when an individual uses an II to make his or her message clearer. An example of an improving communication online II included, "They help in the process of getting out what you are trying to say." Another example of using an II online to improve an online conversation is "They allow me to be free with what I say and have better responses to their side of the conversation."

Category 3: **Proactive/Rehearsal Communication (n = 10).** These online IIs occur when individuals are trying to prepare for an upcoming online conversation or message. An example of rehearsal communication is "it gives you time to plan and plot what you will say before you actually type it and hit send." Another example is "having a heads up for conversation makes it go smoothly without having to type random facts online is [*sic*] impersonal and to the point. You don't want to be typing irrelevant sentences."

TABLE 7.1.
EFFECTS OF ONLINE COMMUNICATION

CATEGORY	FREQUENCY	EXAMPLE
Emotion management	14	Feeling disappointed or masking bluntness
Communication improvement	11	Getting out what you are trying to say
Proactive/rehearsal	10	Planning what to say to seem more organized
Situation management	8	What to say when asked for money
Professional conduct	3	Responding to e-mail in professional manner

Category 4: **Situation Management (n =8).** These IIs occur when individuals have IIs in an effort to control events, past or present. Situation management included examples such as "you try to anticipate what the other person is going to reply to what you are typing. It is almost like you try to control the conversation" or "remember what a professor or other important person said to you." Perhaps one of the most interesting responses was "It helps me to decide who I want to instant message. (If I owe a friend money and I instant message him, I know he will ask me for it.)"

Category 5: **Professional Conduct (n = 3).** Professional conduct IIs happen when people use IIs for professional success. An example of professional conduct is "when writing e-mail to a professor or someone important." A second example of a professional conduct II used in online interactions is "When trying to professionally communicate or respond to an e-mail in a professional manner."

UNIQUE ASPECTS TO ONLINE COMMUNICATION THAT STIMULATES IIS

Students also discussed how the differences between CMC and face-to-face communication actually stimulate IIs. One specific way in which this occurs is during the downtime that can potentially occur during an IM session. For instance, imagine that a student is having a heated argument with her boyfriend over the computer when her roommate enters the room. Suppose

the woman stops typing to greet her roommate or to protect her privacy. What was once a very rapid back-and-forth communication exchange suddenly halts for a moment. Her boyfriend is left wondering why the conversation halted. This gives her boyfriend the opportunity to have IIs surrounding the CMC. For instance, the partner may have a self-awareness II to try and understand if he said something to upset his girlfriend. It is very likely that the person will replay (or even reread) parts of the conversation up to the point of the drop off. Perhaps the person is reflecting on the past. The person may also be having an II about what he would like his girlfriend to say. Table 7.2 lists and provides examples for unique aspects of online communication.

Another interesting aspect of CMC is that it is possible that someone may actually be communicating with someone other than with whom they intend to communicate. In other words, an individual may sit down at the computer with the intent to IM a close friend. But another person may be signed on instead of the friend and respond to the IM or e-mail intended for the friend. Other times, individuals might lie about their identity, perhaps changing their gender or shaving several years off their given age. In addition to the message recipient being someone other than the intended, it is also easy for the message sender to pose as someone else.

When an individual assumes a false identity online, he or she will likely have IIs surrounding this issue. For instance, if a man impersonates a woman while online, he will need to have a proactive II to consider what a female would say, and the difference in how a recipient or conversational partner would respond to a woman than a man. The message sender may choose to

TABLE 7.2.
UNIQUE ASPECTS TO ONLINE COMMUNICATION THAT STIMULATES IIS

ASPECT	EXAMPLE
Downtime	When a roommate walks in and one stops typing
Unintended recipient	Accidentally flirting online with the intended recipient's roommate
False identity	Pretending to be a member of the opposite sex
Away messages	Announcing personal whereabouts or activities while away from the computer
Lack of nonverbal	An e-mail without emoticons or custom fonts or capitalization
Archives	An instant message conversation that is saved and printed

alter the message based on this phony information in an effort to be more convincing as a gender swapper or simply to gain the desired effect that motivated the initial deception.

Several students also mentioned having IIs in response to the away messages posted by individuals. Away messages are those messages posted on user profiles that indicate what a particular user is doing when away from the computer. Some actual observed away messages include statements such as "In Psy 203. Will be back for lunch" and "At work." These messages seem relatively mild compared to those given as examples as related to the production of IIs. For example, someone may post "out having the time of my life now that Mr. Loser isn't holding me back" after a bad breakup. The person may post this message, specifically knowing that it will elicit a potential reaction from "Mr. Loser" himself. The message creator may hope for a proactive II like "Your away message really hurt me" or "I see you don't need me anymore." What makes these away messages interesting as they pertain to IIs, is that one never knows if their online post will ever actually be read by anyone. The anticipated response is a part of creating the messages. People may have an II about how a person will respond to their away message that they may imagine as an IM.

What is interesting about online IIs as compared with the traditional IIs is the amount of detail. Because of the limited nonverbal element, almost the entire online II occurs verbally, assuming the individual is imagining an online response. Very often, individuals imagine a typed conversation with back-and-forth dialogue. Or they imagine sending an e-mail. Sometimes these online IIs lead to other IIs about a real interaction. For example, an individual may have an II about asking a potential romantic partner on a date via IM, which was very common in the population from which the sample for this study was drawn. The online II about asking for the date may lead to a face-to-face II about the actual date.

Some online conversations can be archived or saved. Certain IM programs allow users to archive all conversations. Other programs require users to cut and paste the conversations into a word-processing program.

SUMMARY

This study extends the scholarship of IIs into the virtual world. Not only do people use IIs in their daily lives for face-to-face encounters, but they also utilize IIs when communicating online. Online communication differs from face-to-face communication, and yet still, individuals maintain the need to rehearse, reflect, analyze, understand, avoid conflict, and substitute their actual online communication encounters through the use of IIs.

In addition to determining that individuals use IIs in their online communication, this study also determined some of the characteristics of those online IIs. This study identified six main topic areas for online IIs: school, social plans, dating, sports, conflict, recent events/gossip. The participants reported having online IIs with a variety of conversational partners, with romantic partners, friends, and family making up the largest categories. IIs result in changed or reconstructed online messages quite often, particularly to avoid conflict or neutralize messages. The IIs effect online communication by improving communication, managing emotion, rehearsing, managing situations, and presenting a professional self. Online communication's unique features stimulate IIs because of downtime, identity fraud by senders or receivers, the presence of away messages, the domination of verbal content as compared to more nonverbal content in face-to-face messages, and the ability to archive online communication.

Like all research studies, this study is not without limitations. The participants in our study were extremely Web savvy. These results may not be generalized to a less Web-savvy population. Students utilize CMC for both their social and professional (educational) lives. Collecting data in an organization with an older population may yield different categories of responses. A second limitation is that some students may not have understood the description of IIs provided early in the survey. Although this description has been used in earlier research (Berkos, Kearney, Allen, & Plax, 2001), it is possible that certain students may have misunderstood the description. However, student participants were enrolled in an introductory communication course where IIs were a part of a 40-minute class lecture.

Now that we are aware that IIs play a role in online communication, scholars may want to begin to explore the extent of that role. Future studies should test the use of IIs in CMC as compared with face-to-face encounters. There may be consistencies across individuals in their tendencies to utilize IIs in a variety of contexts, whether the IIs be online, face-to-face, or through another communication channel, such as phone or letter. Although letter writing seems to be decreasing, the increase of cell-phone usage and technology such as text messaging and caller ID features may stimulate imagined interactions.

Although technologies such as computers and cell-phones may serve to make communication more convenient, it also functions as a means of social alienation. As fewer people communicate face-to-face than in previous generations, this mediated form of communication may begin to substitute for "regular interaction." It seems likely, then, as individuals communicate in person less frequently than online or on the phone, people may have more anxiety, anticipation, or excitement about face-to-face communication. Students are increasingly relying on mediated communication forms to ask for dates, initiate friendships, and ask questions of their professors. These

social transitions make the need for research surrounding how individuals imagine their communication encounters more relevant to these unique, mediated situations.

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